

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for treating hyperpigmentation, or other unwanted pigmentation associated with production of melanin comprising topically administering to the skin of a subject in need of treatment a composition comprising one or more siRNA oligomers specific for mouse and human tyrosinase mRNA in an amount effective to ameliorate, reduce, and/or eliminate the hyperpigmentation, or other unwanted pigmentation associated with production of melanin.
2. (original) The method according to claim 1, wherein the composition is a topical composition.
3. (currently amended) The method according to claim 2, wherein said composition is applied for a period of time effective to ameliorate, reduce, and/or eliminate hyperpigmentation, or other unwanted pigmentation, or other unwanted skin condition associated with production of melanin.
4. (currently amended) The method according to claim 1, wherein the siRNA oligomer has the sequence:

5'-UAGGACCUGCCAGUGCUCUtt-3' (SEQ ID NO: 1)

3'-ttAUCCUGGACGGUCACGAGA-5' (SEQ ID NO: 2)

5'-UAGGACCUGCCAGUGCUCUtt-3' (SEQ ID NO: 1)₂

3'-ttAUCCUGGACGGUCACGAGA-5' (SEQ ID NO: 2)₂

5'-UCCUGGAAACCAUGACAAAtt-3' (SEQ ID NO: 3)₂

3'-ttAGGACCUUGGUACUGUUU-5' (SEQ ID NO: 4)₂

5'-CACACCUGUCUUUGUCUUAAtt-3' (SEQ ID NO: 5)₂ or

3'-ttGUGUGGACAGAAACAGAAC-5' (SEQ ID NO: 6)₂

5. (original) The method according to claim 3, wherein the composition is applied at least once daily for at least one week.
6. (original) The method according to claim 1, wherein the one or more siRNA is present in an amount from about 0.0001 wt % to about 10 wt % of the total weight of the composition.
7. (original) The method according to claim 1, wherein the one or more siRNA is present in an amount from about 0.0005 wt % to about 5 wt % of the total weight of the composition.
8. (original) The method according to claim 1, wherein the one or more siRNA is present in an amount from about 0.001 wt % to about 1 wt % of the total weight of the composition.
9. (original) The method according to claim 1, wherein the composition comprises a cosmetically or dermatologically acceptable vehicle.
10. (original) The method according to claim 1, wherein the composition further comprises a sunscreen.
11. (original) The method according to claim 10, wherein the sunscreen is selected from the group consisting of avobenzone, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide and combinations thereof.
12. (original) The method according to claim 11, wherein the cinnamic acid derivative is octylmethoxycinnamate.
13. (original) The method according to claim 1, wherein the composition further includes an ingredient selected from the group consisting of an alpha hydroxy acid, a beta hydroxy acid, a keto acid, an oxa acid and an oxa diacid.
14. (original) The method according to claim 1, wherein the composition is administered via a transdermal patch.

15. (original) The method according to claim 1, wherein the composition is applied to the face, forehead, neck, arms, hands, legs, knees, feet, chest, back, groin, or buttocks.

16. (currently amended) A method of improving the aesthetic appearance of skin, comprising topically applying to the skin a composition comprising one or more siRNA oligomers specific for mouse and human tyrosinase in an amount effective to reduce, inhibit, or ameliorate one or more unwanted skin conditions associated with production of melanin

17. (original) The method according to claim 16, wherein the improvement is selected from the group consisting of lightening skin tone, reducing the aged appearance of skin, decreasing hyperpigmented states such as age spots, freckles, and the like, improved skin discoloration, and combinations thereof.

18. (original) The method according to claim 16, wherein the skin is sensitive skin.

19. (original) The method according to claim 16, wherein the composition is applied topically at least once daily for at least one week.

20. (original) The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.0001 wt % to about 10 wt % of the total weight of the composition.

21. (original) The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.0005 wt % to about 5 wt % of the total weight of the composition.

22. (original) The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.001 wt % to about 1 wt % of the total weight of the composition.

23. (original) The method according to claim 16, wherein the composition comprises a cosmetically or dermatologically acceptable vehicle.

24. (original) The method according to claim 16, wherein the composition is administered in a liposome delivery vehicle or a transdermal patch.

25. (original) The method according to claim 24, wherein the composition in the liposome delivery vehicle is administered topically.

26. (original) The method according to claim 16, wherein the composition is administered in a biodegradable microsphere.

27. (original) The method according to claim 16, wherein the composition further comprises a sunscreen.

28. (original) The method according to claim 27, wherein the sunscreen is selected from the group consisting of avobenzone, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide and combinations thereof.

29. (original) The method according to claim 28, wherein the cinnamic acid derivative is octylmethoxycinnamate.

30. (original) The method according to claim 16, wherein the composition further includes an ingredient selected from the group consisting of an alpha hydroxy acid, a beta hydroxy acid, a keto acid, an oxa acid and an oxa diacid.

31. (currently amended) A method of treating, reducing, ameliorating, and/or eliminating, hyperpigmentation, or other unwanted pigmentation associated with production of melanin, comprising: providing a composition comprising an siRNA oligomer specific for mouse and human tyrosinase to an individual in need thereof, in an amount effective to block or reduce tyrosinase enzyme production in skin or hair, wherein said inhibition or reduction of tyrosine

enzyme production concomitantly inhibits or reduces the synthesis of melanin, thereby treating, reducing, ameliorating, and/or eliminating hyperpigmentation, or other unwanted pigmentation associated with production of melanin in the skin or hair.

32. (currently amended) The method according to claim 31, wherein the siRNA oligomer has the sequence:

5'-UAGGACCUGCCAGUGCUCUtt-3' (SEQ ID NO: 1)

3'-ttAUCCUGGACGGUCACGAGA-5' (SEQ ID NO: 2)

5'-UAGGACCUGCCAGUGCUCUtt-3' (SEQ ID NO: 1)₂

3'-ttAUCCUGGACGGUCACGAGA-5' (SEQ ID NO: 2)₂

5'-UCCUGGAAACCAUGACAAAtt-3' (SEQ ID NO: 3);

3'-ttAGGACCUUUGGUACUGUUU-5' (SEQ ID NO: 4)₂

5'-CACACCUGUCUUUGUCUUAAtt-3' (SEQ ID NO: 5); or

3'-ttGUGUGGACAGAAACAGAAC-5' (SEQ ID NO: 6)₂

33. (original) The method according to claim 32, wherein the composition is topically applied to the skin.

34. (original) The method according to claim 32, wherein the composition is contained in a liposome delivery vehicle or a transdermal patch.

35. (original) The method according to claim 32, wherein the composition further includes a sunscreen.

36. (original) The method according to claim 35, wherein the sunscreen comprises one or more ingredients selected from the group consisting of avobenzone, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide, and mixtures thereof.

37. (original) The method according to claim 32, wherein the siRNA oligomer is present in an amount of from about 0.0001 wt % to about 10 wt % of the total weight of the composition.

38. (original) The method according to claim 32, wherein the siRNA oligomer is present in an amount of from about 0.0005 wt % to about 5 wt % of the total weight of the composition.

39. (original) The method according to claim 32, wherein the siRNA oligomer is present in an amount of from about 0.001 wt % to about 1 wt % of the total weight of the composition.

40. (cancelled)

41. (cancelled)